Mary Baldwin College Environment-Based Learning Courses Summer 2010

June 28 - July 2 Math in the Garden (ED617)

Learn to use the garden and local environment to teach math skills to students in grades K-8. This course will cover math concepts from basic operations to geometry and data analysis. Discussions will include the use of existing gardens to teach mathematical concepts, the building of gardens as an application of math skills in everyday life, and the use of garden design to aid explanation and practice of mathematical ideas. Learn to use "manipulatives" such as plant trays, seeds, and flowers to help students develop an understanding of number operations. Course will include field trips to gardens and natural areas for implementation practice. Course Instructor: Dr. Verne Leininger, MBC Adjunct Professor, Math.



July 12 - 16 The Intersection of Life and Land (IN634)



This course is designed as a model of the environment-based learning process. Students will participate in an investigation of a local environmental issue, focusing on the integrated relationship of environment to people and culture. Students will explore area history, related books/literature/articles, basic ecological/scientific principles (including math), and cultural connections to conduct a detailed investigation of the issue. Participants will explore issues of land use (i.e. land development, farming) to the impacts on the watershed and water quality (i.e. environment, culture, economy, etc.). The course will

involve field trips for cultural and scientific investigations. The course will also include strategies to help K-12 students identify local problems and develop plans for problem solving/implementation. Course Instructor: Dr. Tamra Willis, MBC Assistant Professor, Graduate Teacher Education.

August 2 - 6 Natural Research: Using the Environment for Student-Driven Investigations (ED618)

The natural environment presents an excellent setting for student development of scientific investigations. This course will provide upper elementary, middle, and high school educators the skills needed to work with students as they design and perform their own science experiments related to the local environment. Educators will participate in watershed-based field investigations, develop experiments, collect and analyze data, and present results and conclusions. Teachers will plan curriculum for effective "environment-based learning" instruction by implementing strategies and techniques presented in class. The course will address learning standards in



the natural sciences. Course Instructor: Dr. Michael Pelton, MBC Adjunct Professor, Wildlife Science.

Graduate Credit: Each course extends beyond the week, on-line, and provides 3 hours of graduate credit from MBC. The courses may apply toward the M.Ed. degree (EBL) through MBC. Tuition is discounted by grants for some of the courses. A \$50 non-refundable registration fee is required. Courses will be held in Staunton and at various field-experience locations. Housing options are available.

For more information or to register, go to: www.mbc.edu/ebl or contact Dr. Tamra Willis, Graduate Teacher Education Program, Mary Baldwin College. 540-887-7135 or twillis@mbc.edu.